©

WHO warns of widespread resistance to common antibiotics worldwide

13 October 2025 | News release | Geneva | Reading time: 3 min (689 words)

العربية | 中文 | Français | Русский | Español

One in six laboratory-confirmed bacterial infections causing common infections in people worldwide in 2023 were resistant to antibiotic treatments, according to a new World Health Organization (WHO) report launched today. Between 2018 and 2023, antibiotic resistance rose in over 40% of the pathogen-antibiotic combinations monitored, with an average annual increase of 5–15%.

Data reported to the WHO Global Antimicrobial Resistance and Use Surveillance System (GLASS) from over 100 countries cautions that increasing resistance to essential antibiotics poses a growing threat to global health.

The new *Global antibiotic resistance surveillance report 2025* presents, for the first time, resistance prevalence estimates across 22 antibiotics used to treat infections of the urinary and gastrointestinal tracts, the bloodstream and those used to treat gonorrhoea. The report covers 8 common bacterial pathogens – *Acinetobacter spp.*, *Escherichia coli*, *Klebsiella pneumoniae*, *Neisseria gonorrhoeae*, non-typhoidal *Salmonella spp.*, *Shigella spp.*, *Staphylococcus aureus* and *Streptococcus pneumoniae* – each linked to one or more of these infections.

The risk of antibiotic resistance varies across the world

WHO estimates that antibiotic resistance is highest in the WHO South-East Asian and Eastern Mediterranean Regions, where 1 in 3 reported infections were resistant. In the African Region, 1 in 5 infections was resistant. Resistance is also more common and worsening in places where health systems lack capacity to diagnose or treat bacterial pathogens.

“Antimicrobial resistance is outpacing advances in modern medicine, threatening the health of families worldwide,” said Dr Tedros Adhanom Ghebreyesus, WHO Director-General. “As countries strengthen their AMR surveillance systems, we must use antibiotics responsibly, and make sure everyone has access to the right medicines, quality-assured diagnostics, and vaccines. Our future also depends on strengthening systems to prevent, diagnose and treat infections and on innovating with next-generation antibiotics and rapid point-of-care molecular tests.”

Gram-negative bacterial pathogens are posing the greatest threat

The new report notes that drug-resistant Gram-negative bacteria are becoming more dangerous worldwide, with the greatest burden falling on countries least equipped to respond. Among these, *E. coli* and *K. pneumoniae* are the leading drug-resistant Gram-negative bacteria found in bloodstream infections. These are among the most severe bacterial infections that often result in sepsis, organ failure, and death. Yet more than 40% of *E. coli* and over 55% of *K. pneumoniae* globally are now resistant to third-generation cephalosporins, the first-choice treatment for these infections. In the African Region, resistance even exceeds 70%.

Other essential life-saving antibiotics, including carbapenems and fluoroquinolones, are losing effectiveness against *E. coli*, *K. pneumoniae*, *Salmonella*, and *Acinetobacter*. Carbapenem resistance, once rare, is becoming more frequent, narrowing treatment options and forcing reliance on last-resort antibiotics. And such antibiotics are costly, difficult to access, and often unavailable in low- and middle-income countries.

Welcome progress in AMR surveillance – but more action needed

Country participation in GLASS has increased over four-fold, from 25 countries in 2016 to 104 countries in 2023. However, 48% of countries did not report data to GLASS in 2023 and about half of the reporting countries still lacked the systems to generate reliable data. In fact, countries facing the largest challenges lacked the surveillance capacity to assess their antimicrobial resistance (AMR) situation.

The political declaration on AMR adopted at the United Nations General Assembly in 2024 set targets to address AMR through strengthening health systems and working with a 'One Health' approach coordinating across human health, animal health, and environmental sectors. To combat the growing challenge of AMR, countries must commit to strengthening laboratory systems and generating reliable surveillance data, especially from underserved areas, to inform treatments and policies.

WHO calls on all countries to report high-quality data on AMR and antimicrobial use to GLASS by 2030. Achieving this target will require concerted action to strengthen the quality, geographic coverage, and sharing of AMR surveillance data to track progress. Countries should scale up coordinated interventions designed to address antimicrobial resistance across all levels of healthcare and ensure that treatment guidelines and essential medicines lists align with local resistance patterns.

The report is accompanied by expanded digital content available in the WHO's GLASS dashboard, which provides global and regional summaries, country profiles based on unadjusted surveillance coverage and AMR data, and detailed information on antimicrobial use.